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Distophragmia*, a new genus of microfungi to accommodate *Endophragmiella rigidiusculaRAFAEL F. CASTAÑEDA-RUIZ¹, SHEILA MIRANDA LEÃO-FERREIRA²,
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Av. Transnordestina s/n, Novo Horizonte, 44036-900, Feira de Santana, Bahia, Brazil**CORRESPONDENCE TO: lgusmao@uefs.brABSTRACT—*Distophragmia* gen. nov. is established to accommodate *Endophragmiella rigidiuscula* based on the type of conidial septa. Descriptions and illustrations are provided.

KEY WORDS— asexual fungi, systematics, tropical fungi

Introduction

Endophragmiella B. Sutton (Sutton 1973) is characterized by monoblastic, integrated, terminal, indeterminate, conidiogenous cells with several or numerous enteroblastic percurrent extensions and unicellular or euseptate pigmented conidia that secede rhexolytically. *Endophragmiella rigidiuscula* shares these common characters of *Endophragmiella* species, except that its conidial septa are distosepta (Castañeda-Ruiz 1988, Leão-Ferreira et al. 2009). If species with distoseptate conidia were included in *Endophragmiella*, the generic concept would have to be expanded drastically. The distoseptate conidia provide good reason to regard *Endophragmiella rigidiuscula* as representing a separate genus. For that reason we propose *Distophragmia* as a new genus.

Taxonomy***Distophragmia*** R.F. Castañeda, S.M. Leão & Gusmão, gen. nov.

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Differs from *Endophragmiella* by its distoseptate conidia.

TYPE SPECIES: *Endophragmiella rigidiuscula* R.F. Castañeda [= *Distophragmia rigidiuscula*]

ETYMOLOGY: From the Latin *disto-* (from *distitutus*), referring to the type of septa + the Greek *-phragmia*, referring to the phragmospore.

Asexual fungi. COLONIES on the natural substratum hairy, brown to black. Mycelium mostly immersed. CONIDIOPHORES distinct, single, unbranched, erect, septate, brown. CONIDIOGENOUS CELLS monoblastic, integrated, terminal, determinate or indeterminate, with several enteroblastic percurrent extensions. Conidial secession rhexolytic. CONIDIA solitary, acrogenous, ellipsoid, obovoid to globose, distoseptate, smooth, brown.

NOTE: *Sporidesmiella* P.M. Kirk resembles *Distophragmia*, but although *Sporidesmiella* shares conidia with a similar conidial ontogeny that are disto- and euseptate or only distoseptate, its schizolytic conidial secession is diagnostic (Kirk 1982). *Matsushimiella* R.F. Castañeda & Heredia, which superficially resembles *Distophragmia*, is separated by sympodial extensions of its conidiogenous cells and separating cells (Castañeda-Ruiz et al. 2001). In *Distophragmia*, sometimes a cupulate remnant of the detached outer layers remains on the conidiogenous cell walls after each enteroblastic percurrent extension, a character shared by *Endophragmiopsis* M.B. Ellis, *Melanocephala* S. Hughes, and *Phragmocephala* E.W. Mason & S. Hughes, genera that are distinguished from *Distophragmia* by their euseptate conidia (Seifert et al 2011).

Distophragmia rigidiuscula (R.F. Castañeda) R.F. Castañeda, S.M. Leão & Gusmão, **comb. nov.**

Figs 1,2

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= *Endophragmiella rigidiuscula* R.F. Castañeda, Fungi Cubenses 3: 9 (1988)

COLONIES on the natural substratum, hairy, black. Mycelium mostly immersed, composed of branched, septate, 2–4 µm wide, smooth, brown to dark brown hyphae. CONIDIOPHORES distinct, single, unbranched, erect, straight, cylindrical, rigid, 40–100 × 4–6 µm, 1–2-septate, smooth, 2–4 percurrent elongations, brown below, pale brown toward the apex. CONIDIOGENOUS CELLS monoblastic, cylindrical, integrated, terminal, determinate or indeterminate with percurrent extensions. Conidial secession rhexolytic. CONIDIA solitary, acrogenous, ellipsoid, obovoid to globose, 2–3-distoseptate, brown, lumina dark brown at the distosepta, 20–23 × 13–15 µm, smooth, with a cylindrical basal frill.

SPECIMENS EXAMINED: CUBA, PINAR DEL RIO PROVINCE, Viñales Valley, 22°36'N 83°42'W, on decaying leaves *Byrsonima crassifolia* (L.) Kunth, 25 November 1987, coll. R.F. Castañeda-Ruiz (INIFAT C87/320, holotype). BRAZIL. BAHIA, Santa Terezinha, Serra da Jibóia, 15°50'S 39°28'W, on decaying leaves of *Andira fraxinifolia* Benth., 5 April 2005; coll. S.M. Leão-Ferreira (HUEFS 98004).



FIG. 1. *Distophragmia rigidiuscula* (HUEFS 98004).
A. Conidiophores, conidiogenous cells, and conidia. B. Conidia.

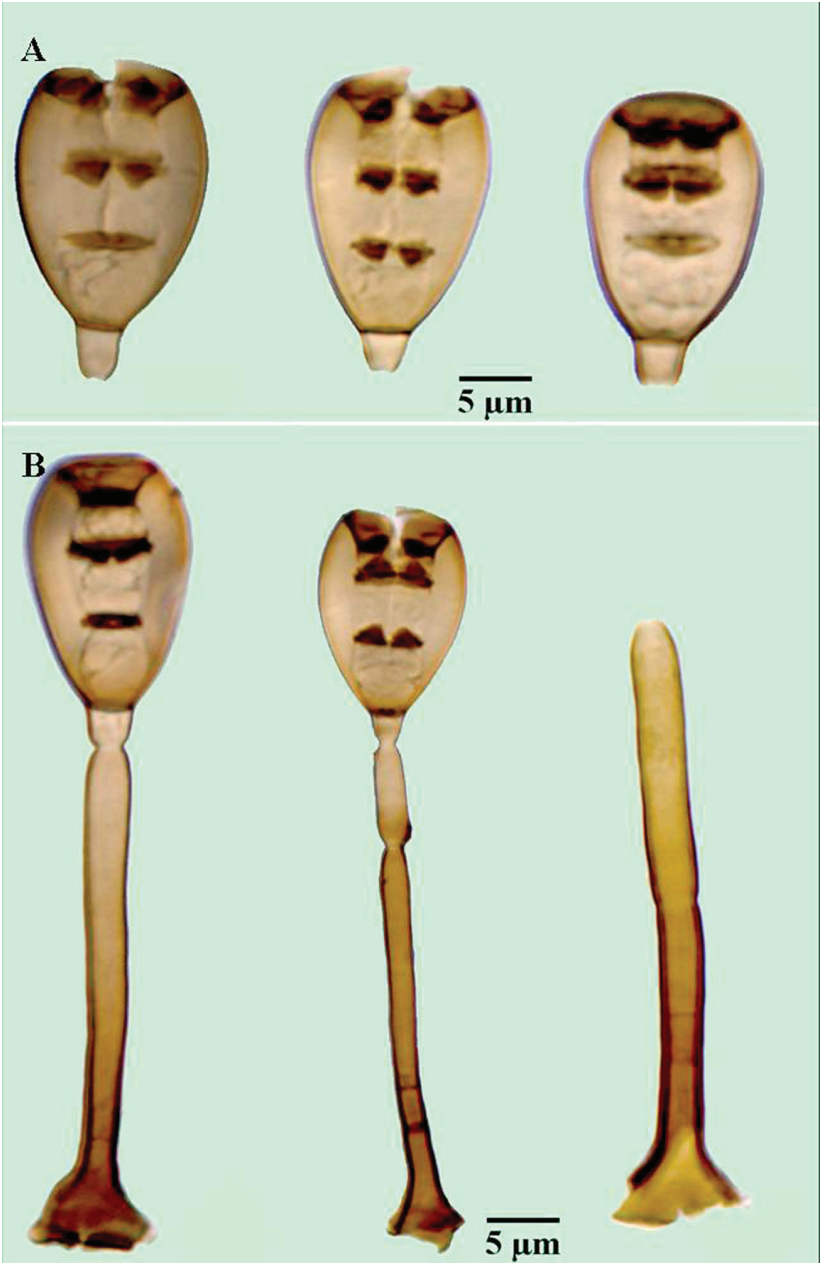


FIG. 2. *Distophragmia rigidiuscula* (HUEFS 98004).
A. Conidia. B. Conidiophores, conidiogenous cells, and conidia.

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